## CDNBS16-T03~T36C - TVS Diode Array Series

## **BOURNS®**

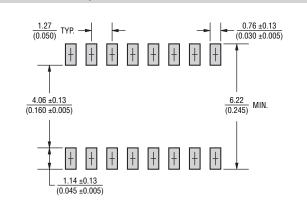
#### **Mechanical Characteristics**

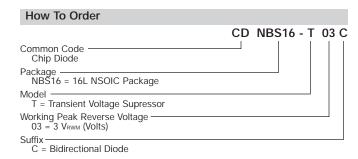
This is a molded JEDEC Narrow Body SO-16 package with lead free 100 % Sn plating on the lead frame. It weighs approximately 30 mg and has a flammability rating of UL 94V-0.

#### **Product Dimensions** 9.80 - 10.00 (0.386 - 0.393) 5.80 - 6.20 (0.150 - 0.157)(0.229 - 0.244)(0.05)(0.054 - 0.068)R x 45 ° 0.19 - 0.25(0.008 - 0.009)0.35 - 0.49 (0.014 - 0.019) 0.10 - 0.25 0.40 - 1.25 (0.004 - 0.009)(0.016 - 0.049)16 PLCS. DIMENSIONS = MILLIMETERS

# Typical Part Marking CDNBS16-T03 CDNBS16-T03 CDNBS16-T05 CDNBS16-T05 CDNBS16-T08 CDNBS16-T08 CDNBS16-T12 CDNBS16-T12 CDNBS16-T15 CDNBS16-T15 CDNBS16-T24 CDNBS16-T24 CDNBS16-T36 CDNBS16-T36 CDNBS16-T03C CDNBS16-T03C CDNBS16-T05C CDNBS16-T05C CDNBS16-T08C CDNBS16-T08C CDNBS16-T12C CDNBS16-T12C CDNBS16-T15C CDNBS16-T15C CDNBS16-T15C CDNBS16-T15C CDNBS16-T24C CDNBS16-T24C CDNBS16-T36C CDNBS16-T24C

#### **Recommended Footprint**



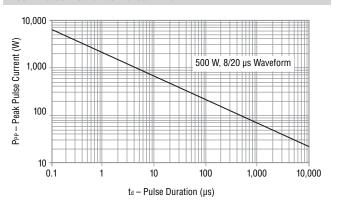


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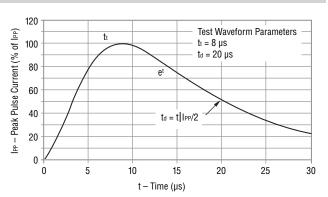
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#### Performance Graphs

#### Peak Pulse Power vs Pulse Time

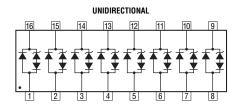


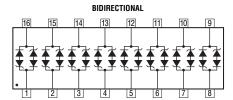
#### Pulse Wave Form



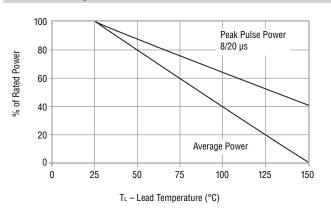
#### **Block Diagram**

The device block diagrams below include the pin names and basic electrical connections associated with each channel.





#### **Power Derating Curve**



#### **Device Pinout**

Pin	Function	Pin	Function
1	GND	9	I/O 1
2	GND	10	I/O 2
3	GND	11	I/O 3
4	GND	12	I/O 4
5	GND	13	I/O 5
6	GND	14	I/O 6
7	GND	15	I/O 7
8	GND	16	I/O 8

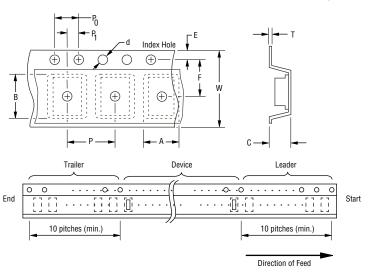
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#### **Packaging Specifications**

The product will be dispensed in Tape and Reel format (see diagram below).



120 °	D <sub>2</sub>
DIMENSIONS: MM (INCHES)	

Devices are packed in accordance with EIA standard RS-481-A.

Item	Symbol	NSOIC 16L
Carrier Width	А	$\frac{6.7 \pm 0.10}{(0.264 \pm 0.004)}$
Carrier Length	В	$\frac{10.5 \pm 0.10}{0.413 \pm 0.004}$
Carrier Depth	С	$\frac{2.10 \pm 0.10}{0.083 \pm 0.004}$
Sprocket Hole	d	$\frac{1.55 \pm 0.05}{(0.061 \pm 0.002)}$
Reel Outside Diameter	D	330 (12.992)
Reel Inner Diameter	D <sub>1</sub>	80.0 (3.1500) MIN.
Feed Hole Diameter	D <sub>2</sub>	$\frac{13.0 \pm 0.20}{(0.512 \pm 0.008)}$
Sprocket Hole Position	E	$\frac{1.75 \pm 0.10}{(0.069 \pm 0.004)}$
Punch Hole Position	F	$\frac{3.50 \pm 0.05}{(0.138 \pm 0.002)}$
Punch Hole Pitch	Р	$\frac{8.00 \pm 0.10}{(0.315 \pm 0.004)}$
Sprocket Hole Pitch	P <sub>0</sub>	$\frac{4.00 \pm 0.10}{(0.157 \pm 0.004)}$
Embossment Center	P <sub>1</sub>	$\frac{2.00 \pm 0.05}{(0.079 \pm 0.002)}$
Overall Tape Thickness	Т	$\frac{0.20 \pm 0.10}{(0.008 \pm 0.004)}$
Tape Width	W	$\frac{16.00 \pm 0.20}{(0.630 \pm 0.008)}$
Reel Width	W <sub>1</sub>	$\frac{18.4}{(0.724)}$ MAX.
Quantity per Reel	-	2500

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